Discrete Orbital Control of Individual Electron Shells for Enhanced Probability of Photon Duplication Effects in Rubidium for Monoatomic LASER Functionality

13 August 2025
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Introduction

This purpose of this paper is to explore the possibility of turning a single atom of rubidium (in the context of a specialized mechanism) into its own LASER generator with an eye toward eventually creatively arraying these individual atoms, each independently designed to be maximally efficient, into an efficient overall light-amplification mechanism.

Abstract

When a photon passes through a length of fiber-optic cable doped with rubidium, there is a good chance that it will be duplicated and that the light will be amplified, given enough rubidium and enough initial light. Physicists do not properly understand this phenomenon, but has not stopped the manufacturers of fiber-optic cable from doping cables with rubidium as a signal amplification mechanism for decades. This author has written a number of papers concerning what actually underlies this phenomenon (ibid..)

To briefly summarize this phenomenon, a photon, in order to be duplicated within an alkali metal such as rubidium, must, first, be briefly converted into an electron and that electron must collide either head-on or at a near-head-on angle with the valence electron. The valence electron is then ejected from the system and simultaneously converted into a photon (due to mass loss associated with doubled spin speed at the instant of reflection) and the original electron in the valence position is replaced with another electron which is often mistaken for the original. The new electron provides a repulsive force which ensures the angular momentum of the injected photon (briefly an electron and now back to being a photon) continues on roughly the same trajectory as the ejected electron, resulting in the emission of two photons in near-perfect unison.

A good way to visualize this is as a cue ball in billiards striking another ball, continuing to roll on a bit, and, in the wake of this event, in the original position of the ball which was struck, a new ball pops into existence out of nowhere and its own magnetic repulsive force causes the cue ball (the cue ball being the injected photon in this metaphor,) to re-accelerate and catch up with the ball it just struck, creating the illusion that the original electron never departed from the system and also resulting in the creation of doubled light provided precisely the right circumstances. The energy to replace the original electron, of course, comes from the gravity of atom coupled with the remnant exciton associated with the ejected electron, which acts as a neutrino aggregator.

In order for the injected photon to be converted, it must pass through a zone of comparative positive charge in Shell 4 and be slowed by the magnetic forces of a number of surrounding electrons so that it has time to take on sufficient mass to be considered an electron. It must also be changed in terms of its angular momentum through magnetic deflection from Shell 3 so that it may wind up in Shell 5; the valence shell; and have a chance of colliding with the valence electron.

Armed with this understanding, it becomes evident that a rubidium atom which, individually, only has a modest probability of generating a photon duplication event could be made to have a far greater probability of generating an additional photon if a set of solid-state magnetically-active mechanisms surrounding the atom were used to discretely influence the orbital characteristics of the electrons of the various shells, thereby affecting the probabilities of conversions and collisions rather dramatically.

A south-facing magnet could be used to cause, for example, the valence electron to have a consistent polar orbit (i.e. if one imagines the nucleus to be like a planet, the electron would be made to pass repeatedly over the North and South Poles.) A north-facing magnet could be used create a void of electrons in Shell 4 in an area at the equivalent of 60 degrees of North Latitude relative to the nucleus and a south-facing magnet on the opposite side of the target area (60 degrees North would be the target area for the injected photon) could be used to ensure an abundance of electrons in Shell 3 in the relevant area at about 75 degrees of North Latitude (needed to ensure that the injected photon has something from which to be deflected so that it can make it back into Shell 5.

Conclusion

Such a scheme would increase the probability of any given introduced photon being duplicated by roughly an order of magnitude. If the concept can be established as viable, it should be possible to array these mechanisms in a series in order to allow LED-generated light to be amplified ad infinitum without the use of additional electrical power beyond that used by the LED. Precision control of the injected photons would be required in order to ensure that photons strike the relevant zones of the rubidium atom.